NEW YORK STATE OF OPPORTUNITY. Department of Transportation

Engineering Technology Unit
08/01/2022

Frequently Asked Questions

For NYSDOT's Implementation of Bentley CONNECT Applications

(MicroStation CONNECT, OpenRoads Designer, OpenBridge Modeler)

The intent of this FAQ document is to keep the consultant community updated on NYSDOT's progress throughout our design software transition from Bentley V8i applications (e.g. MicroStation, InRoads) to Bentley CONNECT Edition applications (e.g. MicroStation CE, OpenRoads Designer, OpenBridge Modeler, etc).

Why is NYSDOT making this change?

DOTs across the country are preparing to adopt policies for creating digital 3D models for construction, and to reduce their reliance on paper/PDF plan sets. The primary benefits of these digital deliverables are 1) maintains civil data/clarifies design intent; 2) improved project visualization and clash detection functionality; 3) increased precision of quantity estimation, manufacturing of materials, and automated machine guidance. Bentley's CONNECT applications introduce new technologies that offer advanced 3D model creation and allow the intelligent design intent to be maintained throughout the lifecycle of the project. NYSDOT is committed to utilizing these new technologies to help us adapt to the future of digital delivery.

Additionally, the legacy V8i products are no longer being updated by Bentley and will not be certified on future operating system releases.

When will this changeover happen?

NYSDOT will likely be transitioning through this CONNECT Edition update over the next 12-18 months. There are numerous factors that prevent us from "flipping a switch" and moving all projects directly into the CONNECT products state-wide. The rollout will be introduced with a phased approach, and will be determined on a project-by-project basis.

Will the Highway Design Manual be adapted for CONNECT applications?

Yes, HDM chapters 20—22 and the Project Development Manual Appendix 14 are being revised to incorporate new CADD standards and workflows developed for CONNECT applications. The updated documents will be released at a future date.

Can consultants begin to use CONNECT applications on current projects?

There are many factors that need to be considered before proceeding with CONNECT on an active project. Generally speaking, projects that are using a V8i version should continue with that version through to completion unless otherwise directed by the NYSDOT Consultant Manager and/or Project Manager.

Are there issues with converting V8i project files to CONNECT?

Beyond Bentley's documented workflows for migrating V8i files to CONNECT, NYSDOT has implemented changes to the CADD settings that complicate the file conversion process. The changes that will affect file conversions most significantly are: a) the increase in CADD file Units of Resolution from 1:1,000 to 1:10,000; b) modifications to select cells and line styles to become scalable with the annotation/drawing scale; and c) edits/ additions to Feature Definitions and Text Styles.

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Have any significant changes been made to NYSDOT's overall CADD environment?

NYSDOT has implemented a change to the default Units of Resolution (UoR) and Solids Accuracy setting for all CADD files. This change has been carried through to all seed files, cell library files and WorkSpace configuration files (ie. .dgnlib files). This change was required to align NYSDOT with recommended industry standards, and to allow our designs to be utilized with greater accuracy for steel manufacturing.

Feature Definitions, Standard Fonts, Text/Dimension Styles, Line Styles and Cell Libraries have all been updated to account for the new UoR and/or CONNECT requirements.

Additionally, the drawing production workflow for plans and profiles has changed to incorporate new CONNECT features such as Named Boundaries, Text Favorites, Annotation Groups and Sheet Seeds.

What type of training is available?

The best place to locate CONNECT training is on Bentley's application-specific Communities websites, YouTube Channels and the Bentley LEARN Server.